

TURCHIN, N.Ya., inzhener.

Efficient form of cable tunnels. Elek.sta. 27 no.5:53 My '56.  
(MLRA 9:8)

(Tunnels)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0"

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0

SUBMITTED: 00

JPRS

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0"

TURCHIN, N.Ya.

97-57-9-9/17

AUTHOR: Alekseyev, S. N. (Candidate of Technical Sciences).  
TITLE: Damage to Columns of Reinforced Concrete Water-Cooling Tower Built From Concrete Liable to Deterioration by Frost. (Razrusheniye kolonn zhelezobetonnoy gradirni iz nemorozostoykogo betona).

PERIODICAL: Beton i Zhelezobeton, 1957, Nr.9. pp.368-369. (USSR).

ABSTRACT: The reinforced concrete hyperbolic-shaped water-cooling tower of the TETs, №.16 of the Mosenergo, discussed in an article entitled "Construction of a Reinforced Concrete Hyperbolic Water-Cooling Tower" by I. F. Ottivnoy, Sh.Kh. Kulakhmetov and N. Ya. Turchin (Ref.1), is carried on 72 inclined pre-cast reinforced concrete columns, octagonal in section, and 340 mm high. The columns are reinforced with 8 steel bars of 24 mm diameter, and spiral reinforcement of 8 mm diameter at 100 mm intervals. Concrete Mark 140 should have been used, but the columns were made from concrete Mark 200, and no frost-resistance tests were carried out. The cement used was of the pozzolana Portland cement type Mark 400 having slump test values of 4-6 cm, with a water/cement ratio of 0.59. 1 m<sup>3</sup> of this concrete contains 300 kg cement, 601.8 kg of sand and 1280 kg of aggregate. Test cubes after 7 days showed strength of 113.4 kg/cm<sup>2</sup>, and after 28 days

Card 1/3

97-57-9-9/17

Damage to Columns of Reinforced Concrete Water-Cooling Tower Built  
from Concrete Liable to Deterioration by Frost.

198.6 kg/cm<sup>2</sup>. The sand and aggregate were from the Petrovsk pit. The sand was not sieved and the aggregate was not washed. The concrete was mixed in mixers, put into wooden form-work, and consolidated by 1-21 type vibrator. The concrete was hardened by steam-curing at a temperature of 70-80°C for 18-24 hours. The final strength of the concrete was 80-190 kg/cm<sup>2</sup>. The water-cooling tower was put into use in 1955. In the spring of 1957, considerable deterioration of the columns occurred, especially where the cooled water flowed. The columns developed cracks on the surface, and the concrete broke off in slabs, so that the spiral reinforcement was in many cases exposed (see Fig.1). The lower part of the columns were covered by deposits of calcium carbonate, the result of alkalinization due to water (see Fig.2). Some cracks were 5-7 cm deep, exposing not only the spiral reinforcement, but also the main reinforcement. This is caused by freezing of porous concrete saturated with water. The low frost-resistance property of the concrete is due to insufficient density caused by the use of pozzolana Portland cement and the high water content. The damaged parts

Card 2/3 .

Damage to Columns of Reinforced Concrete Water-Cooling Tower Built  
From Concrete Liable to Deterioration by Frost.

97-57-9-9/17

of the column were removed, and the columns were cased in steel mesh, and a fresh layer of concrete applied. Experience shows that for this type of construction, high density concrete should be used to prevent destruction by ice formation in the pores.

AVAILABLE: Library of Congress.

1. Water tower-Construction
2. Concrete-Reinforced Deterioration
3. Concrete-Weather factors
4. Concrete-Weather factors

Card 3/3

TURCHIN, N.Ya., 1969.

TURCHIN, N.Ya., Inzh.

Information relative to the construction of desalting equipment.  
Elek.sta. 29 no.1:69 Ja '58. (MIRA 11:2)  
(Feed-water purification)

TURCHIN, N.Ya.

Precast reinforced concrete foundations for turbogenerators.  
Osn., fund. i mekh. grun. 7 no. 6:11-13 '65. (MIRA 18:12)

TURCHIN, N.Ya., inzh.

Conference on economic work in power engineering. Elek. sta. 35  
(MIRA 12:1)  
no.11:87-88 N '64.

TURCHIN, N.Ya., inzh.

Ceramic radiating pannels for drying surfaces in insulating and finishing operations. Energetik 13 no.3:7-8 Mr '65. (MIRA 18:7)

TURCHIN, N.Ya., inzh.

Conference of power engineering workers on the increase of the technological level and overall mechanization in power system construction.  
Elek. sta. 35 no.8:87-88 Ag '64. (MIRA 17:12)

ZAYDEL', V.A., kand. tekhn. nauk; TURCHIN, N.Ya., inzh.;  
LATYSH, D.I., inzh.

"Design and construction of thermal electric power plants"  
by I.P. Kuptsov, IU.R. Ioffe. Reviewed by V.A. Zaidel',  
N.YA. Turchin, D.I. Latysh. Elek. sta. 34 no.7:91-95 Jl '63.  
(MIRA 16:8)

TURCHIN, N.Ya., inzh.

Equipment of new electric power plants in the U.S.A.  
Energomashinostroenie 9 no.9:46-48 S '63. (MIRA 16:10)

TURCHIN, N.Ya., inzh.

B.D.Kharin's book "Organization of the construction of thermal  
electric power plants." Prom.stroi. 41 no.9:55-56 S '63.  
(MIRA 16:11)

TURCHIN, N.Ya., inzh.

Conference of power engineering workers. Elek. sta. 34 no.6:93-95  
(MIRA 16:9)  
Je '63.  
(Power engineering)

TURCHIN, N.Ya., inzh.

Design of protective helmets for power plant construction workers.  
(MIRA 16:10)  
Energetik 11 no.8:39-41 Ag '63.

TURCHIN, N.Ya., inzh.

Results of the installation and start of new 150Mw. and 200 Mw.  
blocks. Energ. stroi. no.31:18-28 '62. (MIRA 16:7)

1. Moskovskiy filial Vsesoyuznogo instituta po proyektirovaniyu  
organizatsiy energeticheskogo stroitel'stva.  
(Electric power plants)

TURCHIN, Nikolay Yakovlevich; SEMENOVA, V.P., inzh., red.;  
~~MVKHANOV, Yu.N.~~, red.; VELITSYN, B.L., tekhn. red.

[Start of thermal electric-power plants in cold weather]  
Iz opyta pусka teplovых elektrostantsii v zimnikh uslo-  
vиях. Moskva, Orgenergostroi, 1962. 66 p.  
(MIRA 16:9)

(Electric power plants--Cold)  
(Weather operation)

TURCHIN, N.Ya.

Standardize stock temporary structures. Prom.stroi. no.10:27-  
30 '62. (MIRA 15:12)

1. Moskovskiy filial Vsesoyuznogo instituta po proyektirovaniyu  
organizatsiy energeticheskogo stroitel'stva.  
(Buildings, Portable)

TURCHIN, N.Ya., inzh.

Mechanization of operations in the construction of thermal  
electric plants and electric transmission lines. Mekh.stroi.  
19 no.12:7-9 D '62. (MIRA 15:12)  
(Electric power plants) (Electric lines)

TURCHIN, N.Ya., inzh.

Seminar on welding. Elek.sta. 33 no.11:94-95 N '62.  
(MIRA 15:12)  
(Welding—Congresses)

TURCHIN, N.Ya., inzh.

Seminar of welders-electric power engineers. Svar.proissv. no.11:45  
N '62. (MIRA 15:12)  
(Electric engineering—Congresses)

TURCHIN, N.Ya., inzh.

Electric lighting of construction and installation sites.  
Svetotekhnika 9 no.1:24-27 Ja '63. (MIRA 16:1)

1. Vsesoyuznyy institut po proyektirovaniyu organizatsiy  
energeticheskogo stroitel'stva.  
(Electric lighting)

TURCHIN, N.Ya., inzh.

Scientific and technical conference on the construction of large  
thermal electric power plants in Siberia. Teploenergetika 9  
no.10:93 O '62. (MIRA 15:9)  
(Siberia--Electric power plants)

TURCHIN, N.Ya., inzh.

Simplify underground communications. Energ. stroi. no.22:25-27  
'61. (MIRA 15:7)

1. Glavnoye upravleniye po stroitel'stvu i montazhu teplovykh  
elektrostantsiy Urala i Sibiri Ministerstva stroitel'stva  
elektrostantsiy SSSR.  
(Underground construction) (Electric power plants)

TURCHIN, N.Ya., inzh.

From practices of heat supply to the starter unit at the Nazarovo State Regional Electric Power Plant in connection with a start-up under winter conditions. Energ.stroi. no.25:45-50 '61.

(MIRA 15:4)

1. Glavnoye upravleniye po stroitel'stvu i montazhu teplovых elektrostantsiy Urala i Sibiri Ministerstva Stroitel'stva elektrostantsiy SSSR.  
(Nazarovo--Electric power plants--Cold weather operations)

TURCHIN, N.Ya., inzh.

Heating the starting chambers of the main buildings of thermal  
electric plants during the starting period. Energ. stroi. no.20:  
164-165 '61. (MIRA 1961)

(Electric power plants)

TURCHIN, N. Ya., inzh.

"K-welding method for high-pressure pipelines in the United States.  
Svar. proizv. no. 3 :46-47 Mr. '61. (MIRA 14:3)  
(United States—Pipelines—Welding)

TURCHIN, N.Ya., inzh.

Construction of thermal electric power plants in the U.S.A. Energok-  
hoz. za rub. no.5;14-21 S-0 '60. (MIRA 13:10)  
(United States--Steam power plants)

TURCHIN, Nikolay Yakovlevich; KAYETANOVICH, M.M., red.; VORONIN, K.P.,  
tekhn. red.

[Construction of substations and the electrical units of the sta-  
tion] Sooruzhenie podstantsii i e'lektricheskoi chasti stantsii.  
Moskva, Gos. energ. izd-vo, 1961. 287 p. (MIRA 14:7)  
(Electric substations)

TURCHIN, Nikolay Yakovlevich; TARASOV, N.Ya., red.; DZHANIBEKOV, G.G.,  
red.; LARIOMOV, G.Ye., tekhn.red.

[Construction of hydraulic-engineering structures at thermal  
power plants] Sooruzhenie gidrotekhnicheskikh ob"ektov teplovых  
elektrostantsii. Pod red. N.Ia.Tarasova. Moskva, Gos.energ.  
izd-vo, 1960. 275 p. (MIRA 13:9)  
(Steam power plants) (Hydraulic engineering)

TURCHIN, P., inzh.

New paints for water tanks. Pozh.delo 6 no.9:26 S '60.  
(MIRA 13:9)

(Tanks---Painting)

TURCHIN, P., inzh.

Mastic flooring for ship decks. Mor. flot 25 no.2:39 F '65.  
(MIRA 18:L)

TURCHIN, P., inzh.

Shot peening tools for the cleaning of metallic surfaces of  
rust. Mor. flot. 24 no.11:35 N '64. (MTRA 18:8)

TURCHIN, P.

Fireproof paints. Pozh.delo 6 no. 6:ll Je '60. (MIRA 13:?)  
(Paint, Fireproof)

TURCHIN, P., inzh.

Epoxy resins. Pozh.delo 6 no.2:22 F '60. (MIRA 13:5)  
(Epoxy resins)  
(Fire departments--Equipment and supplies)

TURCHIN, P.

New method for protecting steel pipes against corrosion.  
Mor. flot 19 no.5:27-28 My '59. (MIRA 12:7)

1. Starshiy inzh. Glavsvirkhoza Ministerstva morskogo flota.  
(Pipe, Steel--Corrosion)

TURCHIN, P.

Successes of model airplane builders in the people's democracies. Kryl.  
rod. 4 no.8:21 Ag '53. (MLRA 6:7)  
(Europe, Eastern--Airplanes--Models) (Models--Airplanes--Europe,  
Eastern)

TURCHIN, P.; ASSOROV, F., ekonomist.

Serious shortcomings in a much-needed book ("Physical and chemical methods of extinguishing fires on ships" by V.L. Poliakov. Reviewed by P. Turchin, F. Assorov). Mor. flot 18 no.9:30-31 S '58.  
(MIRA 11:10)

1. Starshiy inzhener Glavnogo upravleniya sudovogo khozyaystva  
Ministerstva morskogo flota (for Turchin). 2. Otdel Ministerstva  
morskogo flota (for Assorov).  
(Ships--Fires and fire prevention)  
(Poliakov, V.L.)

TURCHIN, P., rukovoditel' komandy sovetskikh aviamodelistov.

Competition between Soviet and Bulgarian model airplane builders. Kryl.rod.  
4 no.11:11-13 N '53. (MLRA 6:11)  
(Airplanes--Models--Competitions)

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0

TURCHIN, P.

Sports aviation in Poland. Kryl.rod. 2 no.10:17 0 '51.  
(Poland--Aeronautics) (MIRA 8:8)

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0"

TURCHIN,P.

Czechoslovakian gliders. Kryl.rod. 3 no.4:23 Ap '52.  
(MLRA 8:8)

(Czechoslovakia--Gliders (Aeronautics))

TURCHIN, P., starshiy inzh.

Use of seagoing vessels of steel pipes with corrosion-protection  
coatings. Mor. flot 21 no.4:38-39 Ap '61. (MIRA 14:4)

1. Glavsvudkhoz Ministerstva morskogo flota.  
(Marine pipe fitting—Corrosion)  
(Protective coatings)

1. TUNCHIN, P.
2. USSR (600)
4. Cranks and Crankshafts
7. Crankshafts from modified cast iron, Mor.flot 13 no. 4, 1953.

9. Monthly List of Russian Accessions, Library of Congress, APRIL 1953, Uncl.

TURCHIN, P.

Progressive method of wood drying in nonaqueous fluids. Mor.flot  
20 no.10:33 0 '60. (MIRA 13:10)

1. Starshiy inzhener Glavsudkhcza Ministerstva morskogo flota.  
(Ships--Maintenance and repair) (Drying agents)

TURCHIN, P., starshiy inzhener

"A boatswain's manual" by V. Alekseiuk and others. Mor.  
flot 22 no.8:45-46 Ag '62. (MIRA 15:7)

1. Glavnoye upravleniye sudovogo khozyaystva i sudoremontnykh  
zavodov Ministerstva morskogo flota.  
(Seamanship)

TURCHIN, P., starshiy inzh.

Modern means of personal protection in cleaning and painting  
operations. Mor. flot 22 no.6:33 Je '62. (MIRA 15:7)

1. Glavnoye upravleniye sudovogo khozyaystva i sudoremontnykh  
zavodov Ministerstva morskogo flota.  
(Occupations, Dangerous--Safety appliances)  
(Ships--Maintenance and repair)

TURCHIN, P.G., inzh.

Standardization of cabins and equipment in ship repairing.  
Sudostroenie no.7:49-52 J1 '60. (MIRA 13:7)  
(Ships--Maintenance and repair) (Simplification in Industry)

STRIZHEVSKIY, Semen Yakovlevich, kand. tekhn. nauk; TURCHIN, P.Ye.,  
red.; KHOTIMSKIY, P.M., red.; ROZHKO, K.M., red. I-leksiko-  
graf; PLAKSHE, L.Yu., tekhn. red.

[French-Russian dictionary of aviation and technical terms]  
Frantsuzsko-russkii aviatsionno-tekhnikeskii slovar'. Mo-  
skva, Fizmatgiz, 1963. 578 p. (MIRA 17:2)

*Любовь*  
KRASNOBAYEV, L. (g.Odessa); KOROBCHENKO, E.(Riga); KULIK, I.; TALLO, K.  
(042518) (g.Tallinn); KHAYYARDAL, Tõr [Heyerdahl, Thor];GAUKHMAN,  
R.(UA3CH) (Moskva);TURCHIN, V.(G. Noverossiysk).

Use radio communication on boat trips. Radio no.2:24-25 F '57.  
(MLP 10:3)

1. Starshiy inzhener radiokluba Dobrovol'nogo obshchestva sodeystviya  
armii, aviatsii i floty (for Krasnobayev).2. Starshiy inzhener radiokluba Dobrovol'nogo obshchestva sodeystviya armii, aviatsii i flotu Latviyskoy SSR (for Korebchenko).

(Radio in navigation)

107-57-2-29/56

AUTHOR: Turchin, V. (Novorossiysk)

TITLE: "Urozhay" Radio Station on a Cutter. Radio Amateurs' Experience.  
Radio Communication Should Be Used on Boat Trips  
(Radiostantsiya "Urozhay" na katere. U radiolyubiteley yest' opyt.  
Ispol'zovat' radiosvyaz' v shlyupochnykh pokhodakh)

PERIODICAL: Radio, 1957, Nr 2, p 25 (USSR)

ABSTRACT: "Urozhay"-type radio stations are successfully used on fishing  
ships of "Azcherrybflot" for communication within the 50- to 60-km  
range. A slight remodelling of the antenna system adapted for ship  
operation is mentioned in the article.

AVAILABLE: Library of Congress

Card 1/1

URCHIN, V.F.

AUTHOR: Rydnik, V. L.

64-8-14/19

TITLE: Conference on the Question of the Exploitation of Wastes  
of Soda Production and the Reduction of Their Quantity  
(Soveshchaniye po voprosu ispol'zovaniya otkhodov sodovogo  
proizvodstva i umen'sheniya ikh kolichestva).

PERIODICAL: Khimicheskaya Promyshlennost', 1957, Nr 8, pp. 50-51 (USSR)

ABSTRACT: The conference took place in Khar'kov in September 1957. The conference was called by the Allunion Association for Chemistry imeni D. I. Mendeleyev and the scientific research institute for basic chemistry (NIOKhim). The lectures and reports dealt with the results of the works carried out in the years 1954 up to 1957. These works concerned the protection of the North-Donets river and of the underground waters around the Don against contaminations by the waste waters of the chemical factories in the Donbass. Certain successes were obtained in the working out of processes for the exploitation of the chloride refuse of the soda production and of the production of a series of goods (calcium chloride, barium chloride, and others more) from the latter. Plans were worked out for the deduction of the waste waters from the chemical works directly into the Sea of Azof, without

Card 1/3

Conference on the Question of the Exploitation of Wastes of Soda Production and the Reduction of Their Quantity

64-8-14/19

touching the North-Donets. Following shortcomings were detected: still great quantities of chloride solutions are discharged into the water reservoirs which causes great damage to agriculture, fish-, water-, and energy economy. On the other hand, however, there is a great shortage of calcium chloride as good, of that substance that forms the main component of the waste of the soda production. It was found that the present production of calcium chloride is completely insufficient. V. F. Turchin from the NIUIF (scientific research institute for fertilizers, insecticides and fungicides) gave in his report the results of the many years' investigations of the application of the ammonium chloride as fertilizer. The possibility of using the latter as fertilizer before the seed in the regions of the neutral and alkaline soils (Ukraine, North-Caucasus, West-Siberia, etc.) was detected. It would be expedient to increase up to 1960 the production of ammonium chloride up to 270,000 tons (80,000 tons nitrogen). A new variant of the soda production was worked out. It is based upon the application of dolomite

Card 2/3

Conference on the Question of the Exploitation of Wastes of Soda Production and the Reduction of Their Quantity

64-8-14/19

instead of limestone or chalk. It was found that for the stopping of the salting of the North-Donets with chlorides refuse it is necessary to build a main pipe-line from the Donbass to the Sea of Azof.

AVAILABLE: Library of Congress

Card 3/3

TURCHIN, V. F.

AUTHOR: TURCHIN, V. F. 56-7-18/66  
TITLE: Multiphonon Processes in Crystals. (Mnogofonnnye protsessy v  
kristallakh, Russian)  
PERIODICAL: Zhurnal Eksperim. i Teoret. Fiziki, 1957, Vol 33, Nr 7,  
pp 124-131 (U.S.S.R.)  
ABSTRACT: In theory the differential cross section is computed for:  
1.) Unelastic neutron scattering by crystals with emission of any  
number of phonons.  
2.) Unelastic neutron scattering by crystals with absorption of  
any number of phonons.  
The functions obtained are tested on the basis of two examples:  
1.) Scattering of "cold" neutrons by hot material.  
2.) Scattering of neutrons by cold material.  
The functions obtained are applicable also to the scattering of  
fast neutrons by the free nucleus. (With 1 Illustration and  
1 Slavic Reference).  
ASSOCIATION: Not given  
PRESENTED BY  
SUBMITTED: 12.12.1956  
AVAILABLE: Library of Congress  
Card 1/1

TURCHIN, V. F.

89-3-3/30

AUTHOR: Turchin, V. F.

TITLE: Multiple-Scattering Corrections in Spherical and Ring Geometries (Popravki na mnogokratnoye rasseyaniye v sfericeskoy i kol'tsevoy geometriyakh)

PERIODICAL: Atomnaya Energiya, 1958, Vol. 4, Nr 3, pp. 244 - 249 (USSR)

ABSTRACT: A method is given of how to apply corrections in multiple-scattering as a consequence of the measured angular distribution of elastically scattered neutrons. It is assumed that the mean neutron path in the medium in which the scattering takes place is comparable with the mean free length of path of neutrons, but that this value is not exceeded in any case. In the beginning the probability for double-scattering is calculated by direct calculation of the integrals, and the probability for a triple- and multiple scattering is estimated; this is done for a spherical and a ring-shaped cross section of isotropic neutron scattering. For the case of an isotropic neutron scattering - the neutron energy amounting to

Card 1/2

89-3-3/30

Multiple-Scattering Corrections in Spherical and Ring Geometries

several MeV - the scattering cross section can be represented by a sum  $\sigma(\theta) = \sigma_1(\theta) + \sigma_2(\theta)$ , where  $\sigma_1(\theta)$  de...  
notes the value in the frontal direction and  $\sigma_2(\theta)$  is more or less isotropic. Therefore all processes of elastic scattering can descriptively be divided into 2 groups, while all cases of multiple scattering can be divided into 4 groups. The probability of double scattering of all 4 groups can be calculated by means of the results which had been obtained in the isotropic scattering. Analogously to this the triple- and multiple scattering can be classified. There are 5 figures.

SUBMITTED: March 5, 1957

AVAILABLE: Library of Congress

1. Neutrons-Scattering-Mathematical analysis

Card 2/2

TURCHIN, V. F.

AUTHOR: Turchin, V. F. 56-1-30/56

TITLE: The Excitation of the Optical Oscillations of a Crystal by Slow Neutrons (Vozbudzhdeniye medlennymi neytronami opticheskikh kolebaniy kristalla)

PERIODICAL: Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958  
Vol. 34, Nr 1, pp. 219-220 (USSR)

ABSTRACT: In multiaatomic crystals not only the acoustic but also the optical oscillations of the lattice are excited in the scattering of neutrons. In this connection the identification of the different branches of the dispersion function  $\omega(q)$  due to the high experimental errors generally is very difficult or altogether impossible. But the following can be shown: When the velocity  $v$  of the neutrons is higher than the maximum velocity  $c_{\max}$  of the sound and when the neutrons incide on the crystal under a Bragg angle, the reflected beam beside the elastically scattered neutrons only contains such neutrons which are scattered on the optical and not on the acoustic branches of the oscillations. This fact can be used for the experimental determination of the optic frequencies. Due to the inevitable angle difference

Card 1/3

The Excitation of the Optical Oscillations of a Crystal  
by Slow Neutrons

56-1-30/56

△ in the neutron beams the real spectrum of the scattered neutrons will contain the energies  $E_0 - \hbar\omega_{ac}$  of the neutrons exciting the a ustic oscillations. In this connection  $E_0$  signifies the initial energy of the neutrons. The author here examines which restriction the separation of the optical oscillations from the a ustic ones signifies for  $\Delta$ . The author here finds the condition  $\Delta \ll \hbar\omega_{opt}/mc^2$ . Then the cross section of scattering with excitation of the oscillations belonging to an optical branch is calculated. The cross section of this process calculated for an elementary cell is written down. The frequency of the oscillations is in the optical oscillations only comparatively little dependent on the wave vector  $\vec{q}$  of the emitted phonon. In NaCl, e.g., this frequency changes by no more than 20% in the entire variation range of  $\vec{q}$ . The cross section of the process calculated under these conditions is written down. Finally the excitation of the longitudinal optical oscillations in a NaCl-crystal is discussed as example. The differential cross sections of the scattering on a NaCl-molecule found in this manner are numerically given here. There are 2 references, all of which are Slavic.

Card 2/3

The Excitation of the Optical Oscillations of a Crystal by Slow Neutrons 56-1-30/56

SUBMITTED: October 22, 1957

AVAILABLE: Library of Congress

Card 3/3

DAVIDSON, G.O.; PROKHOROVA, L.B.[translator]; MOROZOV, V.N.[translator];  
TURCHIN, V.F. [translator]; POPOVA, M.F., red.

[Biological effects of whole-body gamma radiation on human beings]  
Biologicheskie posledstviia obshchego gamma-oblucheniia cheloveka.  
Pod red. M.F.Popovoi. Moskva, Atomizdat, 1960. 107 p.  
(MIRA 14:8)

1. Johns Hopkins University. Operations Research Office.  
(RADIOACTIVE FALLOUT) (GAMMA RAYS—PHYSIOLOGICAL EFFECT)

MARCHUK, Guriy Ivanovich; Prinimal uchastiye TURCHIN, V.F.; VORONOV, L.I.,  
red.; MAZEL', Ye.I., tekhn. red.

[Calculation methods for nuclear reactors] Metody rascheta iadernykh  
reaktorov. Moskva, Gos. izd-vo lit-ry v oblasti atomnoi nauki i  
tekhniki, 1961. 666 p.  
(Nuclear reactors) (MIRA 14:11)

26.2241

38339  
S/058/62/000/005/030/119  
A001/A101

AUTHOR: Turchin, V. F.

TITLE: Solution of the equation of neutron moderation by means of conjugated moments

PERIODICAL: Referativnyy zhurnal, Fizika, no. 5, 1962, 42, abstract 5B331  
(V sb. "Neytron.fizika", Moscow, Gosatomizdat, 1961, 66-73)

TEXT: The approximate method for solving moderation equation of Greyleng-Gertsel'. based on expanding neutron flux into a Taylor series, is applicable to a very restricted region (insignificant flux variation within energy range where scattering functions are different from zero). The author uses global representation of the flux within the range of integration instead of local representation given by Taylor series. This leads to solution of moderation equation by the method of finite differences. Neutrons are considered possessing energies essentially exceeding the moderator temperature, i.e., in most cases neutron loses its energy colliding with the moderator. The neutron scattering density is represented by a second-order parabola. As a result, a recurrent relation is obtained for scattering density which includes conjugated logarithmic

Card 1/2

S/058/62/000/005/030/119  
A001/A101

Solution of the equation of neutron ...

moments of energy loss. The stability and accuracy of the method is checked for the case when neutron energy is so high that the known scattering function on a free fixed nucleus can be used. The method is applicable up to very large absorptions, and its accuracy is incomparably higher than in the Greyleng-Gertsel' method. The author recommends to employ the method for calculating neutron spectrum in superthermal energy region where the scattering function has a complicated appearance.

B. Bergel'son

[Abstracter's note: Complete translation]

Card 2/2

26.2242

32980  
S/641/61/000/000/007/033  
B104/B102

AUTHOR: Turchin, V. F.

TITLE: Neutron scattering from crystals in incoherent approximation

SOURCE: Krupchitskiy, P. A., ed. Neytronnaya fizika; sbornik statey.  
Moscow, 1961, 74 - 91

TEXT: A study of the incoherent approximation of the differential scattering cross section  $d^2\sigma/dEd\Omega$  shows that, in the calculation of reactors, incoherent approximation can be used only for inelastic neutron scattering. With elastic scattering the interference of neutron waves has to be taken into account. At very small initial neutron energies  $E_0$ , the incoherent approximation error in the total elastic scattering cross section is less than 20%. If  $E_0$  is close to  $E_{crit}$ , the error is approximately 4%. At higher  $E_0$ , the error is decreased as  $1/E_0$ .

Card 1/4

32980

S/641/61/000/000/007/033  
B104/B102

Neutron scattering from

$$\frac{d^2\sigma_{n_1, n_2}}{dE d\Omega} = \frac{\sigma_0}{4\pi} \left(1 + \frac{1}{\mu}\right)^2 \frac{k}{k_0} e^{-2W} \times \\ \times \sum_{\{q_i t_i\}} \prod_{i=1}^{n_1} \frac{h^2 (xe_{q_i t_i})^2 (n_{q_i t_i} + 1)}{2\mu m N e_{q_i t_i}} \times \prod_{i=n_1+1}^n \frac{h^2 (xe_{q_i t_i})^2 n_{q_i t_i}}{2\mu m N e_{q_i t_i}} \times \\ \times \delta(\epsilon - \sum_{i=1}^{n_1} s_{q_i t_i} + \sum_{i=n_1+1}^n s_{q_i t_i}), \quad (1)$$

where

$$W = \frac{1}{2} \sum_{q t} \frac{h^2 (xe_{q t})^2}{\mu m N e_{q t}} \left( n_{q t} + \frac{1}{2} \right). \quad (2)$$

is obtained for the differential neutron scattering cross section for a monatomic cubic crystal with emission of  $n_1$  and absorption of  $n_2$  phonons in incoherent approximation (Placzek G., Van Hove L., Phys. Rev., 93, 120 (1954)). Using the results of Y. Krumhansl and H. Brooks (Journ. Chem. Phys., 21, 1663 (1953)), formulas for the differential neutron scattering

32980

S/641/61/000/000/007/033  
B104/B102

Neutron scattering from ...

cross section of graphite are derived from (1).  $d\sigma/dE$  is obtained as a power series of  $1/\mu$  in the form

$$\frac{d\sigma}{dE} = \sigma_0 \left(1 + \frac{1}{\mu}\right)^2 \sqrt{1 + \frac{\epsilon}{E_0}} \sum_{n=0}^{\infty} \left(\frac{1}{\mu}\right)^n \varphi_n(E_0, \epsilon), \quad (27)$$

where

$$\varphi_n(E_0, \epsilon) = \frac{(a+b)^{n+1} - (a-b)^{n+1}}{2(n+1)b} \sum_{k=0}^n \frac{(-1)^k v^k}{k!} \frac{f_{n-k}(\epsilon)}{(n-k)!} \quad (28)$$

$$\left. \begin{aligned} a &= \mu A = 2E_0 + \epsilon, \\ b &= \mu B = 2\sqrt{E_0(E_0 + \epsilon)}. \end{aligned} \right\} \quad (29)$$

(Placzek G. Phys. Rev., 93, 895 (1954)). These formulas furnish expressions for the first moments of energy loss, which are analogous to those of Placzek (Phys. Rev., 86, 377 (1952)). The order of the  $(1/\mu)$  and  $(1/E_0)$  terms in these expressions is, however, higher than in Placzek's relations. Denotations:  $\sigma_0$  is the neutron scattering cross section for a free nucleus;  $\vec{k}_0$  and  $\vec{k}$  are the initial and final wave vectors of the

Card 3/4

32980  
S/641/61/000/000/007/033  
B104/B102

Neutron scattering from ...

neutron;  $E_0$  and  $E$  are the respective energies;  $\vec{q}_i$  and  $\vec{e}_{q_i t_i}$  are the wave and unit vectors of the polarized  $i$ -th phonon;  $t$  is the polarization index;  $\kappa = \vec{k} - \vec{k}_0$ ,  $\varepsilon = E - E_0$ ;  $\omega_{q_i t_i} = \hbar \vec{\omega}_{q_i t_i}$  is the energy of the  $i$ -th phonon;  $n = n_1 + n_2$ . M. V. Kuzarnovskiy (ZhETF, 31, 696 (1956)) is mentioned. There are 5 figures, 1 table, and 15 references: 4 Soviet and 11 non-Soviet. The four most recent references to English-language publications read as follows: Kothari L. S., Singwi K. S., Phil. Mag., 2, 694 (1957); Placzek G., Van Hove L., Phys. Rev., 93, 1207 (1954); De Sorbo W., Tyler W. W., J. Chem. Phys., 21, 1660 (1953); Placzek G., Phys. Rev., 93, 895 (1954).

Card 4/4

S/903/62/000/000/003/044  
B102/B234

AUTHORS: Turchin, V. F., Sokolov, Yu. V.

TITLE: The fundamental state of three-or four-particle systems

SOURCE: Yadernyye reaktsii pri malykh i srednikh energiyakh; trudy Vtoroy Vsesoyuznoy konferentsii, iyul' 1960 g. Ed. by A. S. Davydov and others. Moscow, Izd-vo AN SSSR, 1962, 38-43.

TEXT: The authors consider a quantum system of  $n$  identical spinless particles of mass  $m$  and pair interaction potential  $V(r) = kr^2/2$ , and determine the function  $f(r)$  for the wave function  $\Psi = \prod_{i < k} f(r_{ik})$ . For this potential

$$f(r) = e^{-\frac{1}{2k} \sqrt{\frac{k}{m}} r}, \quad (4),$$

and the ground state energy is given by

$E = \frac{3}{2} \hbar \sqrt{\frac{k}{m}} Vn(n-1). \quad (5).$  By means of the substitution  $f(r) = [y(r)]^{\frac{1}{N}}$ ,  
(7) the equation used for determining the eigenvalues becomes

$$y'' + \frac{2}{r} y' + \frac{m}{\hbar^2} \left[ \frac{E}{n-1} - \frac{n}{2} V(r) \right] y = 0. \quad (8).$$

Card 1/3

S/903/62/000/000/003/044  
B102/B234

The fundamental state of...

The smallest eigenvalue yields  $E_0$ , called the energy in zeroth approximation. The corresponding wave function will be  $\Psi_0 = \prod_{i<3} [g(r_{ik})]^{1/N}$ ; (9). The Schrödinger equation in this case will be  $H\Psi_0 = E_0\Psi_0 + \varphi$ ,  $\varphi$  being a function that vanishes on the diagonal  $r_{ik}=r$ , and

$E - E_0 = \frac{\int \varphi \Psi_0^* d\tau}{\int \Psi_0 \Psi_0^* d\tau}$ . (11). For the so-called "fundamental energy" the relations

$$\Delta E_1 \equiv E_1 - E_0 = \frac{\int \varphi \Psi_0^* d\tau}{\int |\Psi_0|^2 d\tau}, \quad (12) \text{ or } E_1 \equiv \frac{\int \Psi_0^* H \Psi_0 d\tau}{\int |\Psi_0|^2 d\tau}. \quad (13)$$

With the trial functions  $\Psi = e^{-\alpha(r_{12}+r_{13})} e^{\beta r_{23}}$  (14) for He or helium-like ions and  $\Psi = e^{-\alpha(r_{12}+r_{13}+r_{23})}$  (15) for the system considered here in the case of the attractive potential  $V(r) = -e^2/r$ , numerical calculations are carried out for He, Li<sup>+</sup>, Be<sup>2+</sup> and the attractive system. This method may be used also for calculating binding energies of lightest nuclei which is

Card 2/3

The fundamental state of...

S/903/62/000/000/003/044  
B102/B234

demonstrated for tritium and  $\alpha$ -particles. There are 1 figure and 2 tables.

ASSOCIATION: Fiziko-energeticheskiy institut Gosudarstvennogo Komiteta  
Soveta Ministrov SSSR po ispol'zovaniyu atomnoy energii  
(Physics and Power Engineering Institute of the State Committee  
of the Council of Ministers of the USSR of Utilization of  
Atomic Energy)

Card 3/3

MARCHUK, G.I.; TURCHIN, V.F.; SMELOV, V.V.; ILYASOVA, G.A.

Methods for calculating the spectra of slow neutrons. Atom.energ.  
(MIRA 15:12)  
13 no.6:534-546 D '62.  
(Neutrons—Spectra)

AM4016100

BOOK EXPLOITATION

s/

Turchin, Valentin Fedorovich

Slow neutrons (Medlenny\*ye neytrony\*) Moscow, Gosatomizdat, 1963.  
371 p. illus., biblio. Errata slip inserted. 4000 copies printed.

TOPIC TAGS: slow neutron, neutron, thermal neutron, slow neutron scattering, slow neutron diffusion, neutron diffusion, slow neutron spectrometry, neutron physics

PURPOSE AND COVERAGE: This book is intended for atomic and nuclear physicists, for scientific personnel working in the field of atomic energy, and may also be useful to students in advanced courses in universities and schools of higher technical education specializing in atomic-power-plant engineering. The book deals with slow-neutron physics and its application to building nuclear reactors. The elastic and inelastic neutron scattering in different substances (moderators) as well as neutron diffraction and its application for analysis of atomic and magnetic structure of crystals are discussed. The author thanks Ye. Ya. Doil'nitsyn G. I. Marchuk, A. G. Novikov,

Card 1/6

L 14699-66 EWT(m)/EPF(n)-2/EWA(h) DM

ACC NR: AP6008246

SOURCE CODE: UR/0089/65/019/005/0428/0432.

36

AUTHOR: Turchin, V. F.

B

ORG: none

TITLE: Computation of differential cross sections for slow neutron scattering  
by means of integration with respect to time 19.44.5

SOURCE: Atomnaya energiya, v. 19, no. 5, 1965, 428-432

TOPIC TAGS: neutron scattering, differential cross section, slow neutron,  
applied mathematics, integration

ABSTRACT: A method is proposed for calculating the differential cross sections  
for the scattering of slow neutrons on coupled atoms by means of integration of  
the Van Hove formula, introducing under the integral sign a cutoff factor which  
leads to an averaging of the cross section over some energy range, and this  
result in turn can be used to compare theoretical and experimental data. The  
method demonstrated enables the differential cross sections for a liquid to be  
calculated according to a model proposed previously. Calculations for water  
and ice near the melting point reveal the presence of a discontinuity in the  
total cross section at the ice-to-water transition; this result agrees with

UDC: 539.125.525

Card 1/2

2

L 14699-66

ACC NR: AP6008246

the experimental data of Heinloth. [NA]

0  
SUB CODE: 20, 12 / SUBM DATE: 06Jun65 / ORIG REF: 001 / OTH REF: 007

BVK  
Card 2/2

TURCHIN, V.F.

Calculation of the differential scattering cross section of slow  
neutrons by integration with respect to time. Atom. energ. 19  
no.5:428-432 N '65. (MIRA 18:12)

L 25702-06 EVT(m)/EFF(n)-2/EHP(t)/GMA(h) IJF(c) JD/NW/JG  
ACC NR: AT6006753 SOURCE CODE: UR/3158/65/000/010/0001/0008

AUTHOR: Liforov, V. G.; Nikolayev, M. N.; Nozik, V. Z.; Parfenov, V. A.; Semenov,  
V. A.; Turchin, V. F.

ORG: Physics and Power Institute, State Committee on the Use of Atomic Energy, SSSR  
(Fiziko-energeticheskiy institut, Gosudarstvennyy komitet po ispol'zovaniyu atomnoy  
energii SSSR)

TITLE: Investigation of inelastic scattering of slow neutrons from zirconium hydride

SOURCE: Obninsk. Fiziko-energeticheskiy institut. Doklady, no. 10, 1965. Isdale-  
dovaniye neprugogo rasseyaniya mcdlennykh neytronov na gidride tsirkoniya, 1-8

TOPIC TAGS: neutron spectrum, neutron scattering, zirconium <sup>compound</sup>, hydride, neutron  
spectrometry, slow neutron, scattering cross section, differential cross section

ABSTRACT: The article describes measurement of the spectra of neutrons scattered by  
 $ZrH_{1.46}$  at an angle of  $80^\circ$  to the incident beam, at temperatures 490C and 20C. The  
measurements were made with a slow-neutron double spectrometer described by I. I.  
Bondarenko et al. (Inelastic Scattering of Neutrons in Solids and Liquids, Proceed-  
ings of a Symposium, Chalk River, 1962). A mechanical interrupter phase with the  
IBR reactor was used to produce neutron pulses of 75  $\mu$ sec. The spectrometer resolu-  
tion was  $22.5 \mu$ sec/m in the elastic-scattering region. The intensity of the mono-  
chromatic neutrons at the same measurements was  $5 \times 10^4$  neut/sec at energy 25 Mev.  
The measurements were made for neutrons with initial energy 0.02 Mev, the total re-

Card 1/2

L 23702-66

ACC NR: AT6006753

2-

solution of the spectrometer in the elastic-scattering region being  $45 \mu\text{sec}/\text{m}$ . The plotted differential scattering cross sections were compared with theoretical calculations and found to agree well with the theoretical spectrum. To calculate the doubly-differential scattering cross section of zirconium hydride in the first approximation, the initial data on the spectra of the normal oscillations of the ZrH crystal were taken from the published data based on certain model assumptions. The preliminary results indicate that even rough measurements yield valuable information on the dynamics of the atoms of this substance. More accurate measurements are now under way. The authors thank A. L. Leypunskiy and F. I. Shapiro for interest in the work. Orig. art. has: 5 figures and 3 formulas.

SUB CODE: 20/1 ORIG REF: 003/ OTH REF: 001  
SAB1 DATA: none

Card 2/2 PV

L 3721-66 EMT(m)/EPF(n)-2/EWA(h)

ACCESSION NR: AT5022108

UR/3158/65/000/006/0001/0014

AUTHOR: Turchin, V. F. 44,55

TITLE: Computing differential sections of slow neutrons with the aid of time integration 19, 44, 55 44,55

SOURCE: Obninsk. Fiziko-energeticheskiy institut. Doklady, no. 6, 1965.  
Vychisleniye differentsiyal'nykh secheniy medleniykh neytronov s pomoshch'yu integriruvaniya po vremeni, 1-14.

TOPIC TAGS: neutron scattering, nuclear energy, neutron density, neutron diffusion, particle scattering, algorithm, computer program logic

ABSTRACT: A method of computing differential scatter sections of slow-moving neutrons by means of crystalline and liquid substances is given. The method features a noncoherent approximation with the aid of direct time integration resulting in an algorithm for programmed computation of the quantities  $\frac{d^2\sigma}{dE d\Omega}$  and  $\frac{d\sigma}{dE}$ . The noncoherent Gaussian approximation of the dual differential section of scatter of slow-moving neutrons is given by

$$\frac{d^2\sigma}{d\Omega dE} = \sigma_0 \frac{(\gamma^2 + 1)^2}{4\pi M^2} \left( \frac{E}{E_0} \right)^{\gamma/2} e^{-\varepsilon/2T} \tilde{S}(\gamma, \varepsilon)$$

Card 1/3

L 3721-66

ACCESSION NR: AT5022108

where  $\sigma_0$  is the scatter section at the free nucleus,  $M$  is the atomic mass in neutron mass units,  $E_0$  and  $E$  are the neutron energy before and after scatter, and  $T$  is temperature of the dispersive medium, and

$$\xi = E_0 - E$$

$$Q = \frac{1}{M} (E_0 + E - 2 \cos \theta \sqrt{E_0 E})$$

where  $\theta$  is the angle of scatter. A Fourier integral expresses the symmetry-of-scatter law and includes as a term the Van't Hoff autocorrelation function defined for a symmetrical crystal. The direct integration of the scatter integral is the object of the presentation, and an effort is made to perform the integration with certain simplifications which do not seriously violate the statement of the scatter law. The model for the computational algorithm was proposed by the author in "Inelastic Scattering of Neutrons in Solids and Liquids," Vienna 1961, p. 259 and perfected in "Medlenyye neytrony," Gosatomizdat, 1963. The algorithm bears the mnemonic "PRASSIV" (Program for Computing Sections by Time Integration). A verbal description of the program logic is given. Some experimental data on scatter through ice and water are given. The author calls for further experimental and theoretical study of neutron scatter through liquids.

Orig. art. has: 18 equations.  
Card 2/3

L 3721-66

ACCESSION NR: AT5022108

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: NP

NO REF SOV: 001

OTHER: 007

Card 3/3

TURCHIN, V.P.; TROFIMOV, V.A.

Asymptotic formulae for the scattering of slow neutrons on bound atoms. Atom. energ. 18 no.2:118-121 F '65.

(MIR 18:3)

40115-68 PREPRINTS

AG/68/CIA/002/CIA8/CIA21

ACCELERATOR

AUTHOR: TURCHINSKY, V. V.

ABSTRACTS BY BOUND STATE

SOURCE: Atomanaya energiya, v. 12, no. 1, p. 103, 1970.  
TOPIC: Neutron scattering. Cross section of the neutron, bound atom, transport length.

scattering angle

ABSTRACT: The Placzek-Wick method is used to obtain asymptotic formulas for the cross section of the scattering angle, the energy loss neutron energy, the conjugated energy loss momenta, and the conjugated energy moments. These formulas differ from the ordinary moments in that the integration is carried out over the initial rates of energy. The asymptotic formulas are made necessary by the fact that the energy loss momenta are finite in the presence of chemical bonds.

The first article normal to the page

Card 1/2

"APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0

L-42115-AB

ACCESSION NR: AP5005601

SEARCHED INDEXED SERIALIZED FILED

SUBMITTED: 03Oct63

EDITED:

SUB CODE: NF

NR REF RGV: 003

STAMP: 003

APPROVED FOR RELEASE: 03/14/2001

CIA-RDP86-00513R001757520004-0"

TURCHIN, V. L., Cand of Med Sci -- (diss) "The Special Features of Internal  
and Intraarterial Blood Transfusion on the Breathing Function of Blood  
During the Course of a Traumatic Shock, (Experimental Investigation)  
Lvov, 1959, 14 pp (Lvov State Medical Institute) (KL, 5-60, 130)

PETROV, D.G., dotsent; KRIVORUCHKO, R.A.; TURCHIN, V.L.; YEDKINA, V.D.

Centralized supply of flasks with factory produced blood preser-  
vatives. Probl.gemat.i perel.krovi no.7:50-53 '61. (MIRA 14:9)

1. Iz L'vovskogo nauchno-issledovatel'skogo instituta pereli-  
vaniya krovi (dir. - dotsent D.G. Petrov).  
(BLOOD—COLLECTION AND PRESERVATION)

AUTHOR:

Turchin, V.Ye., Candidate of Historical Sciences  
SOV-3-58-8-14/26

TITLE:

The Instructors Go in the Field  
zhayut v rayon)

PERIODICAL:

Vestnik vysshyey shkoly, 1958, Nr 8, pp 59 - 60 (USSR)

ABSTRACT:

Correspondence faculties and departments are attached to both of the agricultural vuzes in Saratov. Many thousands of agricultural workers are being instructed there without discontinuing their work. Thus, 70% of the students of the Saratovskiy institut mekhanizatsii sel'skogo khozyaystva imeni M.I. Kalinina (Saratov Institute of Agricultural Mechanization imeni M.I. Kalinin) are kolkhoz and sovkhoz workers. However, the system of correspondence training still has many serious deficiencies which impede the turning out of highly skilled specialists. The author recommends some alterations in the social science curriculum (the most important works of Marx

C2

Card 1/2

- 81 -

TURCHIN, Ya.

Development of Marx's aspect Kapital by V.I.Lenin in The Development of Capitalism in Russia, In Russian. Vestis Latv ak no.4:17-24 '60.

(Lenin, Vladimir Ilich) (Marx, Karl) (Capitalism)  
(Russia--Economic conditions) (EEAI 10:7)

SVETOV, B.S.; TURCHIN, Yu.A.

Simplified apparatus for amplitude-phase measurements of the low-frequency electromagnetic field. Geofiz. razved. no.2:68-87 '60.  
(Electromagnetic prospecting)

(MIRA 13:12)

LUR CHIN, YU-N.

## PAGE 1 BOOK INFORMATION

0007/15/23

CONTINUATION OF PREVIOUS PAGE  
CONTENTS OF THIS VOLUME, VOL. 2 (Geophysical Survey No. 2) Moscow, Geotekhnika,  
1960. 125 p. (Series: Obras geofisicas en version original) 3,000 copies printed.

SPONSORING AGENCY: Glavnoye upravleniye geologii i mineral'noy promstsvy SSSR Sovetskoye  
ministerystvo nauchno-tekhnicheskikh rabot, street Gofstechnitsa,  
Moskva.

REV.: O.K. Glazov; Executive Ed.: S.M. Tengash; Tech. Ed.: L.V. Zaitsev.

PURPOSE: This book is intended for engineers and technicians working in geology  
and geophysics.

CONTENTS: This is a collection of 11 articles on geophysical methods and techniques of surveying natural deposits. The authors discuss problems in processing and interpreting the results of surface and underground seismic surveys and seismic logging. New types of geophysical instruments and methods, the API-2 and API-3 dipole-dipole-plane seismometers, the small portable GOF-5 seismic instrument, two-dimensional recordings that allow for solving seismic waves, a particle, and nuclear fission instruments are discussed in detail. No generalizations are made. References to foreign literature are given.

TABLE OF CONTENTS:

|   |     |
|---|-----|
| YUDKOVICH, V. I. and V. N. KARASIK. On the Pulse GFA-6<br>Measurements for Control of Plates in Borehole Seismic Surveys                | 60  |
| BRODICK, B. S., and Yu. A. Fomichev. Simplified Equipment for Measuring<br>Resistivity of the Earth Using Electromagnetic Field (API-3) | 63  |
| GOLDBERG, P. G., and I.A. Kholoden. Small Field Seismograph for<br>Recording the Velocities of Elastic Waves                            | 67  |
| GOLDBERG, P. G. Design of Perforated Models of Seismic Media  | 100 |
| FETIS, A. A. Improved Circuit for Making the Moment of Explosion by<br>Radio  | 119 |
| DZYUBANOV, V. P., V. P. DZERZHINSKII, and V. I. KERZHNIKOV. Using a Photogram to<br>Transform Curves                                    | 120 |
| GORSHKOV, I. M. Changing the Existing Layout of the IM-3 Inclinometer   | 123 |
| AVAILABLE: Library of Congress  |     |

CONT 3/3

24/Jan/1990  
22-30-60

YEGOROV, G.A.; TIKHONOV, T.M.; TURCHINA, G.V.

Effect of moisture on the density of the wheat kernel. Izv.vys.  
ucheb.zav.; pishch.tekh. no.5:17-19 '59. (MIRA 13:4)

1. Krasnodarskiy institut pishchevoy promyshlennosti, kafedra  
tekhnologii zerna.  
(Grain)

Ca

116

Metabolism in dysentery. Glycemic curve of dysenterics on forced glucose feeding by the method of Staub-Traugott, Z. M. Dintenftein, E. M. Turchin and P. N. Shabolash. *Pediatrya* 1940, No. X, 3-8. — The first glucose (I) load of 1.5 g. per kg. body wt. was given to 60 patients, 6 mos. to 3.5 yrs. old. An hr. later the same amt. of I was given. From the comparison of the initial blood sugar curves with those obtained after loading, it is concluded that in light cases of dysentery the ability to assimilate carbohydrates is lowered. This ability improves with the clinical recovery of the patient. In bad cases the disability is more marked and lasting (over 1 mo.), despite satisfactory clinical improvement. The basic cause may be a lowered secretory activity of the pancreas and a simultaneous or sep. weakening of the glycogen and sugar-fixing capacity of the liver. T. I.

ASH-SEA METALLURGICAL LITERATURE CLASSIFICATION

TURCHINA, K. V.

"Some Biochemical Changes in the Blood of Patients Suffering From Constrictions of the Pyloroduodenal Area of an Ulcerous Origin." Cand Med Sci, Khar'kov Medical Inst, Khar'kov, 1954. (RZhBiolKhim, No 2, Jan 55)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (12)  
SO: Sum. No. 556, 24 Jun 55

TURCHINA, L. A.: Master Med Sci (diss) -- "Material on the study of the Rh-factor (Experimental-clinical investigation)". Khabarovsk, 1959. 22 pp (Khabarovsk State Med Inst), 220 copies (KL, No 13, 1959, 113)

PLOTNIKOV, N.N.; TURCHINA, M.Ye.

Cyanine stains in the treatment of certain human and animal  
helminth infections, survey of the literature. Med.paraz.i  
paraz.bol. 29 no.1:101-104 Ja-F '60. (MIRA 13:10)  
(ANTHELMINTICS)

TURCHINA, T.M.; MESHALOVA, A.N., direktor; GRINBAUM, F.T., professor, nauchnyy rukovoditel'.

Yellow variety of the Flexner dysentery bacillus (Author's abstract). Zhur. mikrobiol. epid. i immun. no.7:72 Jl '53. (MLR 6:9)

1. Gor'kovskiy institut epidemiologii i mikrobiologii. (Dysentery)

TURCHINA, T.M.

Resistance of Sonne dysentery bacillus cultures to various disinfectants.  
Gig. i san. no.7:48 J1 '54. (MIRA 7:8)

l. Iz Gor'kovskogo nauchno-issledovatel'skogo instituta vaktsin i  
syvorotok.  
(SHIGELLA SONNEI) (DISINFECTION AND DISINFECTANTS)

TURCHINA, T. M.

TURCHINA, T. M.: - "A study of the biological properties of the Sonne dysentery virus". Gor'kiy, 1955. Gor'kiy State Medical Inst imeni S. M. Kirov. (Dissertation for the Degree of Candidate of Medical Sciences)

SO: Knizhnaya Letopis', No. 40, 1 Oct 55

SAPOZHNIKOV, D.I.; MAYEVSKAYA, A.N.; KRASOVSKAYA-ANTROPOVA, T.A.;  
PRIALGAUSKAYTE, L.L.; TURCHINA, V.S.

Effect of anaerobic conditions on changes in the ratio of main  
carotenoids in green leaves [with summary in English]. Biokhimiia  
24 no.1:39-41 Ja-F '59. (MIRA 12:4)

1. Botanical Institute, Academy of Sciences of the U.S.S.R., Lenin-  
grad.

(LUTEIN) (VIOLAXANTHIN)  
(PLANTS, EFFECT OF OXYGEN ON)

DUBROVSKIY, V.V., redaktor; KONYUSHKOV, A.M., redaktor; BELITSKIY, A.S., redaktor; BOGOLYUBOVA, B.P., redaktor; DUBROVSKIY, V.V., redaktor; ZHUKOV, A.I., redaktor; KOCHPICHNIKOV, A.A., redaktor; KONYUSHOV, A.M., redaktor; KULICHIKHIN, N.I., redaktor; SEMENOV, M.P., redaktor; TURK, V.I., redaktor; TURCHINOV, V.T., redaktor; ROSSOVA, S.M., redaktor; GUROVA, O.A., tekhnicheskiy redaktor.

[Sinking, equipping and operating wells for the rural water supply; proceedings of the conference of May 18-22, 1954] Sooruzhenie, oborudovanie i ekspluatatsiya skvazhin dlya sel'skogo vodosnabzheniya; trudy Soveshchaniya 18-22 maya, 1954.goda. Moskva, Gos.nauchno-tekhn. izd-vo lit-ry po geol. i okhrane nedor. 1955. 220 p. (MLRA 8:11)

1. Soveshchaniye po voprosam sooruzheniya i oborudovaniya burevykh skvazhin dlya sel'skogo khozyaystva, 1954.  
(Wells) (Water supply, Rural)

FRIDMAN, K.I.; TURCHINA, Ye.L. [Turchyna, O.L.]

Determining copper content of metallic zinc, cadmium and lead-tin  
solders by means of 2,21-bicinchoninic acid. Khim.prom. [Ukr.]  
no.2:74-75 Ap-Je '65.

Qualitative luminescent analysis method for determining zinc.  
Ibid. '75 (MIRA 18:6)